

fluence manifests, so early in the spring, its predominance. At Mount Washington, winds were reported on the 23d, of velocity as high as 130 miles an hour and continuing near that enormous force for twenty-four hours.

RIVERS.

The condition of the rivers will be found in one of the tables on Chart No. 2. The Red river, it will be seen, rose at Shreveport to its highest as the month closed. So also the Missouri at Leavenworth. The Cumberland was very high on the 25th, but afterward fell considerably. The Ohio was in flood, the first of the month, at Cincinnati and Louisville, but it fell at the close. During the whole month the Mississippi river rose slowly but steadily at Vicksburg to forty-three feet above low water mark. Also, about the 11th, it rose at Cairo forty-five feet above low water mark, but, as the month progressed, it fell at the latter point. The month closed without any indications of very alarming floods in the Western rivers.

PECULIAR PHENOMENA AND FACTS.

From Nashville the observer reports, what may be of interest to agriculturists, that an inspection of the country around Nashville by a member of the Board of Trade of that city shows "that the grass-hoppers and other insects which are usually killed by the cold of winter are this spring alive and already moving." Repeated investigation has confirmed this statement.

At Knoxville, March 7, 7 p. m., there was an extraordinarily brilliant aurora, the first of this year, "in two bands: one triangular, base in the horizon, or near it, with opposite vertex, which was ill-defined, about 15° NW from zenith; the other was nearer in the north and far brighter, but not so extensive." The "dark segment," the "waving flag aurora," and the "merry dancers" were plainly seen for some time. The same phenomenon was seen at other points in the West where the night was cloudless. It was also reported, same night, from Albany, N. Y., where "a continuous sheet of brilliant white light encircled the horizon, extending to an altitude of 35° in the Northeast and to an altitude of 12° in the Southwest, the light in the Northeast strongly contrasted with a dark segment of slate-color beneath it and about fifty-two streamers of straw-color." On the same night and hour it was observed at Norfolk, Va., where the color was of a "pale yellow," partly obscured by clouds; and, from this point, it was visible far westward. The Observer at Pike's Peak reports that, for the first time since the occupation of the summit, he saw an auroral arch on the same evening. It was seen simultaneously at Louisville, Kentucky; at Breckenridge, Minnesota; at Eastport, Maine; faintly at Indianapolis, Indiana; apparently at Augusta, Georgia; faintly at Yankton, Dakota; Davenport, Iowa, and other points.

During the conflagration at Indianapolis on the 22d, the wind was observed not to take any cyclonic direction, but to blow in a straight line. At Mobile, on the 22d, the thermometer reached 82° F. At Augusta, Georgia, on the 16th and 17th, there were forty consecutive hours of rainfall, amounting to 5.10 inches. At Salt Lake City, on the 17th, light snow fell from a cloudless sky, while the stars were visible over the whole sky. At Marquette, on Lake Superior, where observations are taken to compare the movements of water in the Lake, and the rise and fall of the barometer, the result shows the water and barometer acted together forty times and in a contrary manner fifty-three times.

At Omaha, Nebraska, on the 6th, wild geese were seen moving south. The Santa Fé Observer states, in his March report: "One year ago the trees and vines had leaved out, but were killed by the frosts that came in the latter part of the month. Thus far, this year, there have been no signs of premature buds, leaves and blossoms; from which fact all classes predict an unusually good year for fruit and all the productions of the soil. But, particularly, are they looking forward to a good "grape crop." In the mountains there is so much snow that water is abundant everywhere; in fact all classes of people are rejoicing."

BREAKING UP OF ICE AND OPENING OF NAVIGATION.

On the 19th of March the ice all disappeared from the river at Rochester, New York, and navigation to that port was resumed on the 23d. At La Crosse, Wisconsin, the Mississippi opened on the 28th, or nine days later than last year, having been closed four months, and one day. The navigation at Alpena, Michigan, re-opened on the 20th; at Detroit on the 18th. At Yankton, Dakota Territory, the ice in the Missouri broke up on the 20th; the ice in the harbor at Buffalo gave way on the same day, but not sufficiently to render navigation easy or safe.

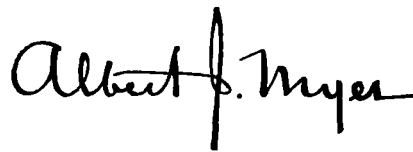
CAUTIONARY SIGNALS.

During the month of March, including the night of the 31st, there were ordered for ports of the United States, in all, fourteen (14) Cautionary Signals. Of this number, one was late. The correctness of one is doubtful. The number reported as actually justified was twelve [12.] This gives as the percentage of correct signaling, 85. Owing to the suspension of navigation on the Lakes, no signals were displayed there during March.

Besides the display of Cautionary Signals at United States ports, there were telegraphed to Canadian ports twenty-nine warnings of approaching storms. Although the exact percentage of justification cannot be determined from data in this Office, it is known that most of these warnings were followed by dangerous gales.

It may serve to illustrate the practical utility of the Cautionary Signals to quote the words of the Observer regarding the warning signal hoisted on the 31st at Norfolk, Va. He says: "The signal was fully justified, as a heavy gale prevailed outside. A very large fleet (200) of sailing vessels put into Hampton Roads, and remained there twelve hours after the signal was lowered."

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